

REMARKS

Claims 1 – 9, 11, 13 – 18 and 27 - 50 are now pending in the application. The Examiner is respectfully requested to reconsider and withdraw the rejections in view of the amendments and remarks contained herein.

REJECTION UNDER 35 U.S.C. § 102

Claims 27 – 32, 34, and 35 stand rejected under 35 U.S.C. § 102(b) as being anticipated by Pannekoek (U.S. Pat. No. 4,748,464). This rejection is respectfully traversed.

In the Examiner's Response to the arguments presented in the Amendment filed March 5, 2003, the Examiner alleges that claims 27 and 34 recite a printing device followed by an intended use statement indicating that the printing device is intended for writing a pattern of an electronic paper. Further, the Examiner alleges that although the Pannekoek reference does not expressly disclose electronic paper, the Pannekoek device is capable of performing the recited intended use of the printing device.

Claims 27 and 34 have been amended to call for an electronic paper printer which writes a pattern on an electronic paper with an electric field. In contrast, Pannekoek teaches a conventional paper printer that utilizes toner. As such, Pannekoek does not anticipate the present invention.



REJECTION UNDER 35 U.S.C. § 103

Claims 1 – 5, 8, 9, 11, 13 – 16, 37 – 40, and 42 – 44 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Vincent (U.S. Pat. No. 5,866,284) in view of Pannekoek. This rejection is respectfully traversed.

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The Examiner alleges that independent claims 1, 8, 11, 37 and 42 would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Vincent to have the pixel electrodes on the outer circumference of the drum as taught by Pannekoek in order to more accurately control the images areas since the electric field on a particular point on the drum can be changed up until the moment right before that point touches the paper. Applicant respectfully asserts, however, that neither Vincent nor Pannekoek contain any teaching, suggestion, or motivation to combine their respective teachings. More particularly, Vincent teaches an electronic paper printer that utilizes a corona charger to build a charge on a surface of a photoconductor. The charge formed on the photoconductor is then preferentially erased by impinging a laser beam or other light exposure device onto the photoconductor. In this manner, the remaining charge formed on the photoconductor polarizes microcapsules contained in the re-writable medium in a determined direction to leave an image on the paper. There is no teaching that suggests that this device may be modified to include the plurality of pixel electrodes taught by Pannekoek as alleged by the Examiner.

Moreover, Applicant respectfully asserts, that the proposed modification of Vincent with the electrodes of Pannekoek would change the principle of operation of Vincent. "If the proposed modification or combination of the prior art would change the

principal of operation of the prior art invention being modified, then the teachings of the references are not sufficient to render the claims *prima facie* obvious.” *In re Ratti*, 270 F.2d 810, 123 USPQ 349 (CCPA 1959) More specifically, the invention of Vincent relies on the use of a corona charger to build charge on a photoconductor that will bias and orientate microcapsules in the electronic paper. In contrast, Pannekoek utilizes electrodes and a magnetic roller to form an a powder image on an image-forming element that is then transferred to a sheet of paper. These are conflicting principles of operation, and the “suggested combination of references and redesign would require a substantial reconstruction and redesign of the elements shown in [the primary reference] as well as a change in the basic principle under which the [primary reference] construction was designed to operate.” 270 F.2d at 813, 123 USPQ at 352 More particularly, by modifying the device of Vincent to include the electrodes of Pannekoek, the corona charger would be eliminated and therefore, Vincent’s basic principle of operation would be completely altered.

Further, a printer that uses electrodes was an aspect that Vincent intended to avoid. This is evident when Vincent states that, “...electrode array printing techniques impose resolution, cost and speed limits upon re-writable media printing devices, and hinder the use of these devices in many applications.” (column 2, lines 28-31) In view of this, Applicant further asserts that although Vincent teaches that electrodes provide the advantage of a potentially compact printer, Vincent directly teaches away from the use of electrodes.

In view of the above, Applicant respectfully asserts that the claimed invention is not obvious in view of Vincent and Pannekoek. Such a combination would change the

principal of operation in Vincent, and further cause the device of Vincent to operate in a manner that Vincent intended to avoid.

With respect to dependent claims 2-7, 9, 13-16, 38-40 and 43-44, these claims are dependent on claims 1, 8, 11, 37, and 42 respectively, and are not obvious for at least the same reasons.

Claims 6, 7, 17, 18 and 41 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Vincent (U.S. Pat. No. 5,866,284) in view of Pannekoek (U.S. Pat. No. 4,748,464) and, further in view of Haas (U.S. Pat. No. 6,100,909). This rejection is respectfully traversed.

Claims 6, 7, 17, 18 and 41 are dependent on independent base claims 1, 8, 11, and 37, respectively. Applicants respectfully assert that these dependent claims should be in condition for allowance for at least the same reasons as set forth above. More particularly, it would not have been obvious to utilize the switching elements as taught by Haas in conjunction with the teachings of Vincent and Pannekoek because the proposed modification of Vincent would change the principle of operation as well as create a device that Vincent intended to avoid.

Claims 33 and 36 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Pannekoek (U.S. Pat. No. 4,748,464) in view of Haas (U.S. Pat. No. 6,100,909). This rejection is respectfully traversed.

Claims 33 and 36 are dependent on independent claims 27 and 34, respectively, and these dependent claims should be in condition for allowance for at least the same reasons as independent claims 27 and 34.

Accordingly, reconsideration and withdrawal are respectfully requested.



CONCLUSION

It is believed that all of the stated grounds of rejection have been properly traversed, accommodated, or rendered moot. Applicants therefore respectfully request that the Examiner reconsider and withdraw all presently outstanding rejections. It is believed that a full and complete response has been made to the outstanding Office Action, and as such, the present application is in condition for allowance. Thus, prompt and favorable consideration of this amendment is respectfully requested. If the Examiner believes that personal communication will expedite prosecution of this application, the Examiner is invited to telephone the undersigned at (248) 641-1600.

Respectfully submitted,

Dated: Aug 5, 2003

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